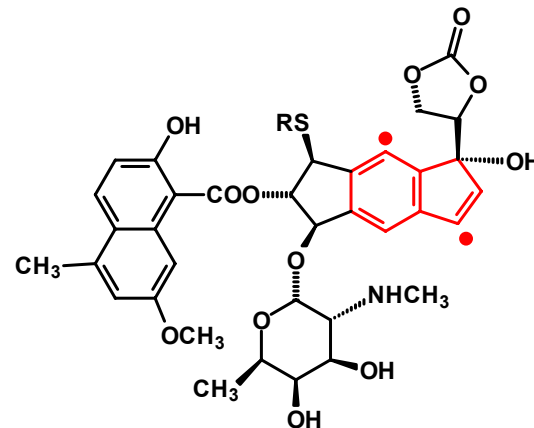
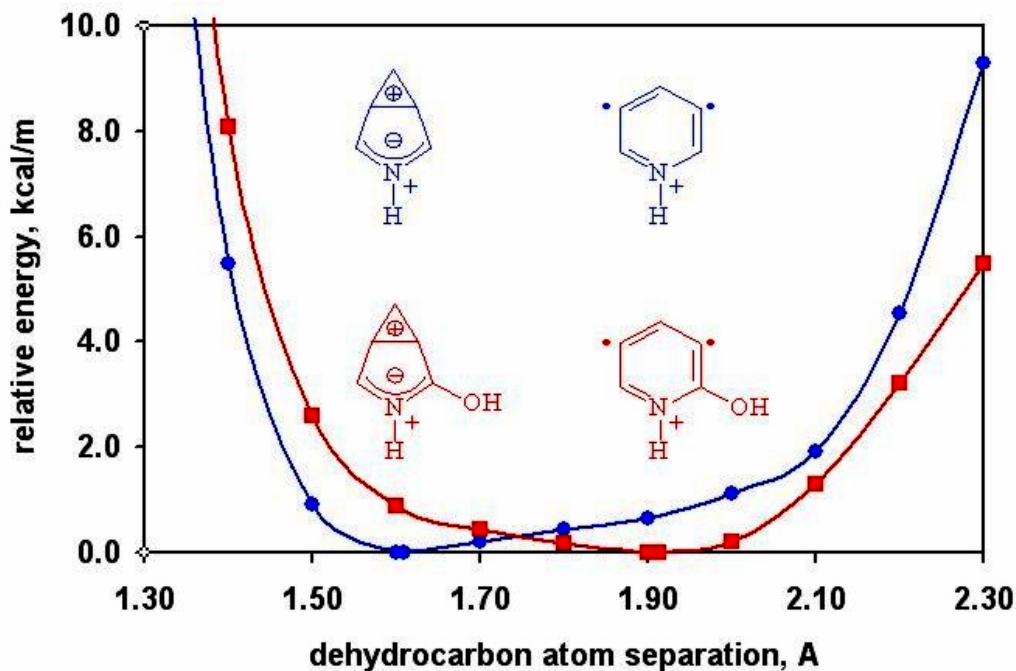


Tuning the Diradical Character of *meta*-Arynes

Hilkka I. Kenttämä, Purdue University (CHE-0315480)
Christopher J. Cramer, University of Minnesota (CHE-0203346)

Aryne diradicals are the reactive intermediates responsible for DNA cleavage in the enediyene class of antitumor antibiotics. Such diradicals are extremely cytotoxic due to their high reactivity.



Neocarcinostatin's biologically active form

A combined computational and experimental study on *meta*-arynes has demonstrated for the first time that the reactivity of such diradicals can be adjusted from low to high by substituents that influence the energy needed for dehydrocarbon separation.